

REMARKS

This amendment is submitted in reply to the outstanding Office Action dated March 30, 2007. Claims 1-4, 6-13, 15-18, 20-28, 30, 31 and 35 currently stand rejected. Applicants have amended independent claims 1 and 6 to improve the readability of the claims. No new matter has been added by the amendment.

In light of the amendment and the remarks presented below, Applicants respectfully request reconsideration and allowance of all now-pending claims of the present application.

Claim Rejections - 35 USC §103

Claims 1-7, 10-22 and 25-38 currently stand rejected under 35 U.S.C. §103(a), as being unpatentable over Satran et al. (U.S. Patent No. 6,430,183, hereinafter "Satran") in view of Stapleton et al. (U.S. Patent No. 6,175,875, hereinafter "Stapleton"). Claims 8, 9, 23 and 24 stand rejected under 35 U.S.C. §103(a), as being unpatentable over Satran in view of Stapleton and further in view of Haggerty et al. (U.S. Patent No. 6,331,983, hereinafter "Haggerty"). Claims 5, 14, 19, 29, 32-34 and 36-38 were canceled, without prejudice, in a prior response and thus the rejections of these claims remain moot. With respect to the remaining rejected claims, Applicants respectfully traverse.

As will be seen below, an embodiment of the claimed invention provides a multicast address that is communicated from a routing unit to a control unit. In the control unit, by searching the tables based on the multicast address, addresses of receivers of the multicast group are indicated by the multicast address and the specific parameters of the receivers are determined. The addresses and specific parameters are provided to the routing unit where the multicast data packets/addresses are filtered in accordance with the specific parameters for each receiver of the multicast group. Then, the routing unit transmits the multicast data packets to the addresses of the receivers or transmits the multicast data packets to the filtered receiver addresses. With this arrangement, centralized, flexible and adaptive filtering based on specific filtering parameters taking into account e.g., reachability of the receiver, available bandwidth, type of terminal screen and the like, can be achieved.

Satran discloses a data transmission system which comprises a plurality of transmitters that transmit data over a broadband channel to multiple receivers (see col. 3, lines 31-33). According to Satran, a receiver can determine whether a packet should be received by masking and pattern matching bits of a received packet against stored address templates (col. 5, lines 26-35). The receiver may further process addresses through the method of Service Type filtering. In this regard, Satran discloses that service types are used in the transmission system to attach a particular organization or classification to the data that is being transmitted or received (col. 5, lines 44-50).

As an initial matter, Applicants respectfully submit that Satran fails to teach or suggest determining, in the control unit, addresses of receivers of the multicast group indicated by the multicast address and the specific parameters of the receivers by searching the tables based on the multicast address as recited in independent claim 1. Thus, in particular, Applicants submit that Satran fails to teach or suggest determining the specific parameters of the receivers by searching the tables based on the multicast address. The Office Action cites col. 4, lines 48-60 and col. 5, lines 33-43 in connection with the above recited feature. In this regard, col. 4, lines 48-60 relate to multicast addressing by allowing groups of receivers to be addressed based upon their service mode as Service Type filtering (see col. 4, lines 55-57). However, there is no mention in this cited passage regarding determining specific parameters of the receivers, much less determining such specific parameters by searching tables based on the multicast address. Service Type filtering, which is described at col. 5, lines 44-59 of Satran, attaches a particular organization or classification to data being transmitted or received and is unrelated to specific parameters of the receivers. Col. 5, lines 33-43 of Satran discloses further details about a masking feature to enable definition of the group of addresses that are of interest. However, this passage, and indeed all of Satran, also fails to teach or suggest determining the specific parameters of the receivers by searching the tables based on the multicast address as recited in independent claim 1.

To the contrary, according to Satran, a receiver determines whether a packet should be received based on address information included in a received data packet and the receiver may process the address through the method of Service Type filtering. Thus, a transmitter according

to Satran has to generate the data packet with address information specific for a receiver, which is a technique that is not flexible with respect to possible changes of receiver specifics. In this regard, if the Examiner maintains the present rejections, Applicants respectfully query as to what disclosure of Satran corresponds to determining specific parameters of the receivers or, more specifically, determining specific parameters of the receivers by searching tables based on the multicast address?

Applicants further note that, since Satran fails to provide any mention with respect to determining the specific parameters of the receivers, Satran also necessarily fails to teach or suggest storing, in a control unit, specific parameters of the receivers that are dependent on receiver conditions as recited in independent claim 1.

The final Office Action cites Stapleton as disclosing “the use of a table that stores multicast communication addresses (col. 7, lines 4-25).” However, even if one assumes Stapleton discloses all of that for which it is cited, namely a table storing addresses, the combination of Stapleton and Satran still fails to teach or suggest determining the specific parameters of the receivers by searching the tables based on the multicast address or storing, in a control unit, specific parameters of the receivers that are dependent on receiver conditions as recited in independent claim 1. Moreover, Stapleton discloses a table that stores a bit mask indicating which ports are to receive a multicast packet. However, regardless of Stapleton’s disclosure relative to transmitting data packets to receivers determined from a multicast address by searching stored tables, Stapleton fails to teach or suggest that any specific parameters of receivers are stored in or determined from the tables. In fact, Stapleton is not concerned with receiver specific parameters at all.

Accordingly, since both Stapleton and Satran fail to teach or suggest determining the specific parameters of the receivers by searching the tables based on the multicast address and storing, in a control unit, specific parameters of the receivers that are dependent on receiver conditions as recited in independent claim 1, any combination of Stapleton and Satran also fails to teach or suggest the above recited features of independent claim 1.

Haggerty fails to cure the above described deficiencies of both Satran and Stapleton and is not cited as such. Since none of the cited references alone teach or suggest determining the specific parameters of the receivers by searching the tables based on the multicast address and storing, in a control unit, specific parameters of the receivers that are dependent on receiver conditions as recited in independent claim 1, any combination of the cited references likewise fails to render independent claim 1 obvious for at least the same reasons described above. Independent claims 6, 15 and 21 each include similar recitations to those described above in reference to independent claim 1. Thus, independent claims 6, 15 and 21 are patentable for at least those reasons given above for independent claim 1. Claims 2-4, 7-13, 16-18, 20, 22-28, 30, 31 and 35 depend either directly or indirectly from a respective one of independent claims 1, 6, 15 and 21, and as such, include all the recitations of their respective independent claims. The dependent claims 2-4, 7-13, 16-18, 20, 22-28, 30, 31 and 35 are therefore patentably distinct from the cited references, individually or in combination, for at least the same reasons as given above for independent claims 1, 6, 15 and 21.

Accordingly, for all the reasons above, Applicants respectfully submit that the rejections of claims 1-4, 6-13, 15-18, 20-28, 30, 31 and 35 are overcome.

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CONCLUSION

In view of the amendments and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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